IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of decoding ~~DCT~~ discrete cosine transform-encoded blocks of a data signal, the method comprising:

(a) predetermining a plurality of subsets of ~~DCT coefficient positions~~ discrete cosine transform coefficients;

(b) receiving a set of ~~DCT~~ discrete cosine transform coefficients obtained from ~~DCT~~ discrete cosine transform-encoding a corresponding portion of a data signal;

(c) selecting one of said subsets of ~~DCT coefficient positions~~ discrete cosine transform coefficients according to a value of a predetermined one of the received ~~DCT~~ discrete cosine transform coefficients;

(d) performing ~~IDCT~~ inverse discrete cosine transform decoding on the selected subset of ~~DCT~~ discrete cosine transform coefficients to recover a representation of the corresponding portion of the data signal; and

(e) repeating steps (b), (c), and (d) for successive sets of ~~DCT~~ discrete cosine transform coefficients.

2. (Original) The method according to claim 1, wherein the data signal is video data encoded according to the MPEG algorithm.

3. (Original) The method according to claim 1, wherein the data signal is video data encoded according to the MPEG2 algorithm.

4. (Currently Amended) The method according to claim ~~3~~ 1, wherein ~~the data signal is an 8x8 macroblock of pixels, and~~ the predetermined one of the received ~~DCT~~ discrete cosine transform coefficients is selected from among the ~~fifty-seventh DCT coefficient~~ discrete cosine transform coefficients with the highest horizontal frequency.

5. (Currently Amended) The method according to claim ~~3~~ 4, wherein the ~~data signal is an 8x8 macroblock of pixels, and the~~ predetermined one of the received ~~DCT~~ discrete cosine transform coefficients has ~~is~~ the ~~sixty-fourth DCT coefficient~~ highest vertical frequency.

6. (Currently Amended) The method according to claim ~~3~~ 1, wherein ~~the data signal is an 8x8 macroblock of pixels, and~~ the predetermined one of the received ~~DCT~~ discrete cosine transform coefficients ~~is the eighth DCT coefficient~~ has the lowest horizontal frequency and the highest vertical frequency.

7. (Currently Amended) The method according to claim ~~3~~ 1, wherein:

the plurality of predetermined subsets of ~~DCT~~ discrete cosine transform coefficients consist of two subsets:

a first subset consisting of ~~the first, second, third, fourth, ninth, tenth, eleventh, twelfth, seventeenth, eighteenth, nineteenth, twentieth, twenty-fifth, twenty-sixth, twenty-seventh, and twenty-eighth positions~~ one quarter of the discrete cosine transform coefficients having the lowest horizontal frequencies and the lowest vertical frequencies; and

a second subset consisting of ~~the first, second, third, fourth, ninth, tenth, eleventh, twelfth, seventeenth, eighteenth, nineteenth, twentieth, twenty-fifth, twenty-sixth, twenty-seventh, twenty-eighth, thirty-third, thirty-fourth, thirty-fifth, thirty-sixth, forty-first, forty-second, forty-third, forty-fourth, forty-ninth, fiftieth, fifty-first, fifty-second, fifty-seventh, fifty-eighth, fifty-ninth, and sixtieth positions~~ one half of the discrete cosine transform coefficients having the lowest vertical frequencies;

~~IDCT~~ inverse discrete cosine transform decoding is performed on the first subset ~~of coefficient positions~~ if the value of the predetermined one of the ~~DCT~~ discrete cosine transform coefficients is below a predetermined threshold; and

~~IDCT~~ inverse discrete cosine transform decoding is performed on the second subset ~~of DCT coefficients~~ if the value of the predetermined one of the ~~DCT~~ discrete cosine transform coefficients is equal to or greater than the predetermined threshold.

8. (Currently Amended) Apparatus for decoding ~~DCT~~ discrete cosine transform-encoded blocks of a data signal, the apparatus comprising:

a data store for storing a predetermined plurality of subsets of ~~DCT~~ discrete cosine transform coefficient positions;

a receiver for receiving a set of ~~DCT~~ discrete cosine transform coefficients obtained from ~~DCT~~ discrete cosine transform-encoding a portion of said data signal;

computation means for:

selecting one of said subsets of ~~DCT~~ discrete cosine transform coefficient positions according to a value of a predetermined one of the received ~~DCT~~ discrete cosine transform coefficients; and

performing ~~IDCT~~ inverse discrete cosine transform decoding on the selected subset of ~~DCT~~ discrete cosine transform coefficients to recover a representation of the corresponding portion of the data signal; and

control logic for routing successive sets of ~~DCT~~ discrete cosine transform coefficients through the receiver and computation means.

9. (Original) The apparatus according to claim 8, arranged for use wherein the data signal is video data encoded according to the MPEG algorithm.

10. (Original) The apparatus according to claim 8, arranged for use wherein the data signal is video data encoded according to the MPEG2 algorithm.

11. (Currently amended) The apparatus according to claim ~~10~~ 8, ~~arranged for use wherein the data signal is an 8x8 macroblock of pixels, and~~ wherein the predetermined one of the received ~~DCT~~ discrete cosine transform coefficients is selected from among the ~~fifty-seventh DCT coefficients~~ discrete cosine transform coefficients with the highest horizontal frequency.

12. (Currently amended) The apparatus according to claim ~~10~~ 11, ~~arranged for use wherein the data signal is an 8x8 macroblock of pixels, and~~ wherein the predetermined one of the received ~~DCT~~ discrete cosine transform coefficients has ~~is~~ the ~~sixty-fourth DCT coefficient~~ highest vertical frequency.

13. (Currently amended) The apparatus according to claim ~~10~~ 8, ~~arranged for use wherein the data signal is an 8x8 macroblock of pixels, and~~ wherein the predetermined one of the received ~~DCT~~ discrete cosine transform coefficients ~~is~~ has the ~~eighth DCT coefficient~~ lowest horizontal frequency and the highest vertical frequency.

14. (Currently amended) The apparatus according to claim 10, wherein:

the plurality of predetermined subsets of ~~DCT~~ discrete cosine transform coefficients consist of two subsets:

a first subset consisting of ~~the first, second, third, fourth, ninth, tenth, eleventh, twelfth, seventeenth, eighteenth, nineteenth, twentieth, twenty-fifth, twenty-sixth, twenty-seventh, and twenty-eighth positions~~ one quarter of the discrete cosine transform coefficients having the lowest horizontal frequencies and the lowest vertical frequencies; and

a second subset consisting of ~~the first, second, third, fourth, ninth, tenth, eleventh, twelfth, seventeenth, eighteenth, nineteenth, twentieth, twenty-fifth, twenty-sixth, twenty-seventh, twenty-eighth, thirty-third, thirty-fourth, thirty-fifth, thirty-sixth, forty-first, forty-second, forty-third, forty-fourth, forty-ninth, fiftieth, fifty-first, fifty-second, fifty-seventh, fifty-eighth, fifty-ninth, and sixtieth positions~~ one half of the discrete cosine transform coefficients having the lowest vertical frequencies;

the computation means performs ~~IDCT~~ inverse discrete cosine transform decoding on the first subset ~~of coefficient positions~~ if the value of the predetermined one of the ~~DCT~~ discrete cosine transform coefficients is below a predetermined threshold; and

the computation means performs ~~IDCT~~ inverse discrete cosine transform decoding on the second subset ~~of DCT coefficients~~ if the value of the predetermined one of the ~~DCT~~ discrete cosine transform coefficients is equal to or greater than the predetermined threshold.

15. (New) The method according to claim 4, wherein the predetermined one of the received discrete cosine transform coefficients has the lowest vertical frequency.

16. (New) The apparatus according to claim 11, wherein the predetermined one of the received discrete cosine transform coefficients has the lowest vertical frequency.